Frequently Asked Questions about HIV Infection and AIDS

What is HIV and why do I need to know about it?

AIDS – *acquired Immunodeficiency syndrome* – is caused by a virus called HIV, the *human immunodeficiency virus*. AIDS was first seen in the United States in 1981 and is now a major problem all over the world. We have all heard much about AIDS in the news over the years, and the number of deaths it has caused worldwide, particularly in areas hardest hit by the disease like Africa. Many myths have been spread about AIDS and it is important for every person to know the facts about HIV and AIDS.

HIV attacks, kills, and damages the cells in the body's *immune system*. Our immune system protects our bodies from disease and infection. Over time, HIV weakens a person's immune system, making it hard to fight off infections and certain cancers. People who have AIDS can get very sick with infections that most healthy people can fight off. These are called *opportunistic infections (OIs)*, and can be life threatening. There is no cure for AIDS and while treatments may help some people manage their disease, AIDS is still fatal.

Almost one million Americans are living with HIV infection, one-third of who do not even know that they have HIV. HIV has hit African American and Hispanic women the hardest. While they make up less than 25 percent of the people in the U.S., they account for more than 77 percent of AIDS cases in women.

How does a person become infected with HIV? Is it true that a pregnant or breastfeeding woman can give HIV to her baby?

HIV is found in body fluids – blood, semen (the fluid a man releases from his penis when he becomes sexually aroused or has an orgasm), vaginal fluid (fluid or secretions from a woman's vagina or birth canal), and breast milk.

HIV can enter the body:

- By having unprotected (meaning not using a condom) vaginal, anal, or oral sex with a person living with HIV. HIV can enter the body through the lining of the vagina (birth canal), vulva ("lips" or opening to the vagina), penis, rectum, or mouth during sex. Anal sex without a condom is very risky because the rectum does not stretch easily (like the vagina), making it more likely to tear and bleed, and making it easier to become infected with HIV.

- By sharing needles, syringes, and other drug injection equipment that has a small amount of blood on it from someone who has HIV. This refers to both equipment used to inject illegal drugs (like heroin and cocaine) and legal drugs (like steroids, insulin, and vitamins). A person can also get HIV from using tattoo or body piercing equipment and razors that have blood on them from someone who has HIV.

- During pregnancy, birth, or breastfeeding from a mother who has HIV to her baby. During pregnancy, HIV can be passed to the growing fetus through the placenta. HIV can also be passed to the baby during the birth process and through breast milk during breastfeeding. Women who have HIV should not breastfeed their babies. An option for a mother who has HIV could be donor milk from a milk bank or infant formula. Call the Mother's Milk Bank, at (919) 350-8599 for help.

  About 25 to 33 percent of all pregnant women who don't take the drug *zidovudine* (AZT) during pregnancy will pass HIV to their babies. Taking AZT while pregnant and having a *cesarean*, or C-section, delivery drops a woman's chances of passing HIV to her baby to 1 percent.

- Through contact with infected blood. Before donated blood was tested for HIV and before heat-treating techniques to kill HIV in blood products were introduced, a person could get HIV from transfusions of HIV infected blood or blood products. Today in the U.S., because all blood is screened for HIV, the risk of getting HIV from blood transfusions is very small. But, some countries don't test donated blood for HIV.

Can you get HIV from doing things like kissing?

HIV has been found in the saliva of people who have HIV. But, it has never been proven that HIV is spread by contact with saliva, such as with kissing. Researchers have also found no proof that HIV is spread through sweat, tears, urine, or feces.

There have been many studies of families of people who have HIV. All have shown very clearly that HIV is not spread through casual contact, such as sharing eating utensils, towels and bedding, swimming pools, telephones, or toilet seats. HIV is not spread by biting insects such as mosquitoes, fleas, or bedbugs.

What are the signs of HIV infection? Do women and men have the same symptoms?

Many people have no symptoms when they first become infected with HIV. But some people get a flu-like illness within a month or two after being exposed to the virus. The flu-like symptoms – fever, headache, fatigue, swollen *lymph nodes* (immune system glands in the neck and groin) – often go away within a week. During this time, HIV is present in large amounts in semen and vaginal fluids and it is very easy to pass the infection to another person.

All people who have HIV go through what is called an asymptomatic period of infection. This means that a person lives symptom free for a period of time. But, during this time they can still pass the infection to another person. The asymptomatic period varies greatly from person to person. Some people may begin to have symptoms within a few months, while others may be symptom free for 10 years or more.

HIV is active inside a person's body, even when no symptoms are present. The virus multiplies, or makes more virus, killing more and more cells of the immune system that fight infection (called CD4 and T cells). This process weakens a person's immune system over time. For many people, the first symptom they notice is large lymph nodes (swollen glands) that may be enlarged for more than 3 months. Other symptoms often felt months to years before the onset of AIDS include:

- Lack of energy or fatigue.

- Weight loss.
- Frequent low-grade fevers and night sweats.
- Frequent yeast infections (in the mouth).
- Skin rashes or flaky skin that is hard to get rid of.
- Short-term memory loss.

Women who have HIV can also have other symptoms that happen more often, may not respond to treatment, and can be harder to cure including:

- Vaginal yeast infections.
- Other vaginal infections such as bacterial vaginosis and common STDs like gonorrhea, chlamydia, and trichomoniasis.
- Human papillomavirus (HPV) infections that cause genital warts and can lead to cervical cancer.
- Pelvic Inflammatory disease (PID), or infection of a woman's reproductive organs.
- Menstrual cycle changes, such as not having periods.

What is AIDS?

AIDS refers to the most advanced stages of HIV infection. The Centers for Disease Control and Prevention defines AIDS as being infected with HIV and having fewer than 200 CD4 and T cells per cubic millimeter of blood. (Healthy adults have CD4 and T cell counts of 1,000 or more). AIDS also includes 26 different conditions, some of which are called *opportunistic infections* (OIs), or infections that don't usually make a healthy person sick. People who have AIDS can have severe OIs, which can be fatal because their bodies can't fight off certain bacteria, viruses, and other microbes. People with AIDS are also more likely to develop cancers, such as *Kaposi's sarcoma*, cancer of the cervix (opening to the uterus or womb), and *lymphomas* (cancers of the immune system).

Symptoms of OIs common in people with AIDS include:

- Coughing and shortness of breath.
- Seizures and lack of coordination.
- Difficult or painful swallowing.
- Mental symptoms such as confusion and forgetfulness.
- Severe and persistent diarrhea.
- Fever.
- Loss of vision.

- Nausea, abdominal cramps, and vomiting.
- Weight loss and extreme fatigue.
- Severe headaches.
- Coma.

Is there a test for HIV?

Health care providers can tell if you have HIV by testing your blood to see if you have *antibodies* (disease-fighting agents) to HIV in your blood. You can't tell if you have HIV antibodies in your blood until 1 to 3 months AFTER you become infected. And, some people can take as long as 6 months to develop antibodies to HIV in their blood. If you think you have been exposed to HIV, it is best to get tested as soon as possible. But, keep in mind that you may have to get another test or have your test repeated in 6 months, to be sure that you have accurate results. Talk to your health care provider about testing and be sure to have counseling before and after you are tested. Counseling will help you to get the treatment you need if you are HIV positive and will help you to learn how to not pass the infection to others. If you are HIV negative, counseling will help you to stay negative by teaching you what you can do to protect yourself.

The test used for HIV is called an *ELISA* test. If the ELISA test is positive, it is always followed with a second test to confirm the result. This is called a *Western Blot* test.

How is HIV infection treated?

In 1981, when AIDS was first seen in the U.S., there were no medicines to fight HIV and few treatments for the opportunistic infections (OIs) and cancers that happen when a person has AIDS. But over the past 20 years, researchers have developed drugs to fight both HIV infection and AIDS OIs and cancers. There is no cure for AIDS and when a person becomes infected with HIV, they will need life long treatment.

The Food and Drug Administration has approved several types of drugs for treating HIV infection. A main goal of treatment is to stop the virus from replicating, or making copies of itself. When the virus is allowed to copy itself, it increases its numbers in a person's body, weakening the immune system. Over time, a person is no longer able to fight off infection and becomes sick.

One group of drugs stops the virus from replicating at an early stage in its life cycle. These drugs are called *nucleoside reverse transcriptase, or RT inhibitors*. RT inhibitors include *zidovudine* (AZT), *zalcitabine* (ddC), *dideoxyinosine* (ddI), *stavudine* (d4T) and *lamivudine* (3TC). These drugs may slow the spread of HIV in the body and delay the onset of OIs.

A second, and more recent, group of drugs are called *protease inhibitors*. They stop the virus from making copies of itself at a later stage in its life cycle. These drugs include *ritonavir* (Norvir), *saquinivir* (Invirase), *indinavir* (Crixivan), *amprevnivir* (Agenerase), *nelfinavir* (Viracept), and *Iopinavir* (Kaletra).

One challenge to treating HIV infection is persons with HIV can build resistance to these drugs. (Resistance means that the drugs stop working.) Health care providers must use several of these drugs at the same time, called a combination treatment, to stop the virus from replicating. Another challenge is the side effects caused by drug treatment. Side effects can vary widely from person to person. Some people can have severe side effects, including death, and may have to stop or change treatments.

One type of treatment, called *highly active antiretroviral therapy*, or HAART, has greatly improved the health of many people with AIDS. It can lower the amount of virus in a person's blood to levels so low that it is hard to detect with a blood test. This can mean relief from symptoms and OIs, increasing the quality of life for a person living with AIDS. There are also treatments for OIs and cancers.

What can I do to keep myself from getting HIV?

There is no cure or vaccine for HIV infection and AIDS. It is a life long condition that requires life long treatment. That's why it's so important to keep from getting it in the first place. Here are ways to keep from getting HIV:

- The best way to prevent HIV or any STD is to practice abstinence (don't have sex). Delaying having sex for the first time is another way to reduce your chances of getting an STD. Studies show that the younger people are when having sex for the first time, the more likely it is that they will get an STD. The risk of getting an STD also becomes greater over time, as the number of a person's sex partners increases.

- Have a sexual relationship with one partner who doesn't have any STDs, where you are faithful to each other (meaning that you only have sex with each other and no one else).

- Practice "safer sex." This means protecting yourself with a condom EVERY time you have vaginal, anal, or oral sex.

  For vaginal sex, use a latex male condom or a female polyurethane condom. For anal sex, use a latex male condom. If needed, use only water based lubricants with male and female condoms. For oral sex, use a *dental dam* – a device used by dentists, made out of a rubbery material, that you place over the opening to the vagina before having oral sex. If you don't have a dental dam, you can cut an unlubricated male condom open and place it over the opening to the vagina.

  Even though it may be embarrassing, if you don't know how to use a male or female condom, talk to your health care provider. The biggest reason condoms don't work is because they are not used correctly.

- Be aware that condoms don't provide complete protection against STDs. But, they do decrease your chances of getting an STD. Know also that other methods of birth control, like birth control pills, shots, implants, or diaphragms don't protect you from STDs. If you use one of these methods, be sure to also use a condom every time you have sex.

- Limit your number of sexual partners. Your risk of getting HIV increases with the number of partners you have.

- Don't douche. Douching removes some of the normal bacteria in the vagina that protects you from infection. This can increase your risk for getting HIV.

- Learn how to talk with your partner about STDs and using condoms. It's up to you to make sure you are protected. The organizations in the "For more information" at the end of this FAQ have tips for talking with your partner. You can also talk with your health care provider about this.
- When you are sexually active, especially if you have more than one partner, get regular exams for STDs from a health care provider. Tests for STDs can be done during an exam. And, the earlier an STD is found, the easier it is to treat.
- Learn the common symptoms of HIV and other STDs. Seek medical help right away if you think you may have HIV or another STD.
- If you are HIV positive and pregnant, you can lower the chances of giving HIV to your baby by taking AZT during pregnancy, labor, and delivery and having your baby take AZT for the first 6 weeks of life.
- Remember that HIV is a life long disease. When you have HIV, you may have periods of time with no symptoms. But, you can still pass the virus to another person. If you have HIV, you need to tell your sexual partners, so they can be tested.

What is the latest research on HIV and AIDS?

The National Institutes of Health conducts research on HIV, which includes testing HIV vaccines and new drug treatments and looking at how HIV damages the immune system. Researchers are testing creams, gels, and films (called *microbicides*) that can be used in the vagina and rectum during sex to prevent HIV infection. They are also looking at the role STDs play in HIV infection, how to help people change their behaviors to keep from getting HIV, and ways for pregnant women to prevent passing HIV to their babies. Women are taking part in AIDS clinical trials across the country. Studies are looking at the signs of HIV infection and AIDS in women and how HIV is passed to babies.

For More Information...

You can find out more about HIV infection and AIDS by contacting the National Women's Health Information Center (800) 994-9662 or the following organizations:

National Institute of Allergy and Infectious Diseases
Phone Number(s): (301) 496-5717
Internet Address: http://www.niaid.nih.gov

National Center for HIV, STD and TB Prevention
Internet Address: http://www.cdc.gov/nchstp/od/nchstp.html

AIDS Clinical Trials Information Service
Phone Numbers (s): (800) 874-2572
Internet Address: http://www.actis.org

HIV/AIDS Treatment Information Service
Phone Numbers (s): (800) 448-0440
Internet Address: http://www.hivatis.org

Centers for Disease Control and Prevention (CDC)
National Prevention Information Network
Phone Number(s): (800) 458-5231
Internet Address: http://www.cdcnpin.org

CDC National STD and AIDS Hotline
Phone Number(s): (800) 227-8922
Internet Address: http://www.ashastd.org/NSTD/index.html

American Social Health Association
Phone Number(s): (800) 783-9877
Internet Address: http://www.ashastd.org

American College of Obstetricians and Gynecologists
Phone Number(s): (800) 762-2264
Internet Address: http://www.acog.org

American Academy of Family Physicians
Phone Number(s): (913) 906-6000
Internet Address: http://www.familydoctor.org

Planned Parenthood Federation of America
Phone Number(s) (800) 230-7526
Internet Address: http://www.plannedparenthood.org

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